

**29**

<b>DART AEROSPACE LTD.</b>	<b>Work Order:</b>	<b>20512</b>
<b>Description:</b> Cable Guard Kit	<b>Part Number:</b>	<b>D205-665-015</b>
<b>Dwg:</b> D2916 Rev. B	<b>Qty:</b>	<b>20/17</b>
<b>Ref:</b> D205-665 Rev. B	Page 1 of 2	

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveler	PL	04.03.10	20
2	DC	Photocopy bluefile and create labels per PPP D205-665-015 <b>CHG002</b>	PL	04.03.31	20
3	GA	Cut blank: 38.94" x 1.78" x 1.00" thick Material: Black UHMW (MUHMWB10) <b>Identify for D2916-1</b>	R.H.	01/07/04	20
4	GA	Cut blank: 44.94" x 1.78" x 1.00" thick Material: Black UHMW (MUHMWB10) <b>Identify for D2916-3</b>	R.H.	30/06/04	20
5	GA	Cut blank: 32.23" x 1.78" x 1.00" thick Material: Black UHMW (MUHMWB10) <b>Identify for D2916-5</b>	R.H.	01/07/04	20
6	GA	Cut blank: 21.37" x 1.78" x 1.00" thick Material: Black UHMW (MUHMWB10) <b>Identify for D2916-7</b>	R.H.	30/06/04	20
7	PG	Issue P/O: <u>2006599</u> to Robert Hanes D2916-1; D2916-3; D2916-5; D2916-7 Plane sides to 1.75" (+/- 0.030") for nice finish	LL	04/07/07	20
8	RG	Receive and inspect for transit damage	LL	04/07/07	20
9	QC6	Inspect dimensions as per Dwg D2916	PL	04/07/07	20
10	MV	Machine as per Folio D2916-1 and Dwg D2916 <b>Identify as D2916-1</b>	SP	04/08/13	17
11	QC2	Inspect parts as they come off the CNC machine	SP	04/08/13	17
12	MV	Deburr	SP	04/08/13	17
13	QC8	Second check	PL	04.08.14	17
14	MV	Machine as per Folio D2916-3 and Dwg D2916 <b>Identify as D2916-3</b>	SP	04/08/16	20
15	QC2	Inspect parts as they come off the CNC machine	SP	04/08/16	20
16	MV	Deburr	SP	04/08/16	20
17	QC8	Second check	PL	04.08.16	20
18	MV	Machine as per Folio D2916-5 and Dwg D2916 <b>Identify as D2916-5</b>	SP	04/08/17	19
19	QC2	Inspect parts as they come off the CNC machine	SP	04/08/17	19
20	MV	Deburr	SP	04/08/17	19

see  
NCR

see  
NCR

Work Order:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Manuf / Design Mgr	Approval QC Inspector
		<del>Part tilted while doing counter bore</del>					

NCR 20512. D205-665-015		WORK ORDER NON-CONFORMANCE					
DATE	STEP	Description of NC section A	Corrective Action Section B	Sign & Date	Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial				
04/08/12	10	-Part lifted while machining D2916-1 x 3	Scrap piece adjust feed and speed -notify Programmer	sl 04.08.12	VB 04.08.12	VB per QSI	VB 04.08.12
04/08/18	18	-Part not sitting in jig properly D2916-5 x 1	inform machinist that he must ensure piece is properly oriented. scrap piece	VB 04.08.18	VB 04.08.18	VB per QSI H201	VB 04.08.18
							Scrap Scrap

PAR#: N/A. Fault Category: manuf. enc. DQA: 11 Date: 04.08.26

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	20512
<b>Description:</b> Cable Guard Kit		<b>Part Number:</b>	D205-665-015
<b>Dwg:</b> D2916 Rev. B		<b>Qty:</b>	17 20
<b>Ref:</b> D205-665 Rev. B		Page 2 of 2	


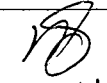
Step	Location	Procedure	By	Date	Qty																																																
21	QC8.	Second check	AB	04.08.18	19																																																
22	MV	Machine as per Folio D2916-7 and Dwg D2916 <b>Identify as D2916-7</b>	SL	04/08/18	20																																																
23	QC2	Inspect parts as they come off the CNC machine	SL	04/08/18	20																																																
24	MV	Deburr	SL	04/08/18	20																																																
25	QC8	Second check	AB	04.08.18	20																																																
26	PK	<b>Pick: Packing Kit (Note: D2916-1/-3/-5/-7 are on BOM as material from Steps 3-6)</b> <table><thead><tr><th>Qty</th><th>Part Number</th><th>Description</th><th>Batch</th></tr></thead><tbody><tr><td>2</td><td>D2529 ✓</td><td>Washer</td><td>B20388</td></tr><tr><td>8 ✓</td><td>D2570</td><td>Bushing</td><td>B18841/B20312A/B21016</td></tr><tr><td>4 ✓</td><td>D2915</td><td>Bushing</td><td>B11649/B16930/B20533</td></tr><tr><td>1</td><td>D2916-1</td><td>Cable Guard</td><td>B20512</td></tr><tr><td>1</td><td>D2916-3</td><td>Cable Guard</td><td>B20512</td></tr><tr><td>1</td><td>D2916-5</td><td>Cable Guard</td><td>B20512</td></tr><tr><td>1</td><td>D2916-7</td><td>Cable Guard</td><td>B20512</td></tr><tr><td>4 ✓</td><td>AN4-47A</td><td>Bolt</td><td>m6393/7531/m9682/m15072</td></tr><tr><td>4 ✓</td><td>AN4-55A</td><td>Bolt</td><td>m14781</td></tr><tr><td>2 ✓</td><td>AN960JD416</td><td>Washer</td><td>m15060</td></tr><tr><td>8 ✓</td><td>MS21042L4 ✓</td><td>Nut (or -4)</td><td>m14764</td></tr></tbody></table>	Qty	Part Number	Description	Batch	2	D2529 ✓	Washer	B20388	8 ✓	D2570	Bushing	B18841/B20312A/B21016	4 ✓	D2915	Bushing	B11649/B16930/B20533	1	D2916-1	Cable Guard	B20512	1	D2916-3	Cable Guard	B20512	1	D2916-5	Cable Guard	B20512	1	D2916-7	Cable Guard	B20512	4 ✓	AN4-47A	Bolt	m6393/7531/m9682/m15072	4 ✓	AN4-55A	Bolt	m14781	2 ✓	AN960JD416	Washer	m15060	8 ✓	MS21042L4 ✓	Nut (or -4)	m14764			
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27	QC4	Inspect Kit 100% for Completeness on the W/O	CL	04/08/20	17																																																
28	PK	Identify and pack for shipping as per PPP D205-665-015 Rev. B w/chg	U	04/08/20	17																																																
29	AC	Cost / part 142.76	CL	04/08/23	17																																																
30	DC	Close W/O 145.15 Inspect Level 21	54C	04.08.24	17																																																
			KJ	04.08.26	17																																																

Rev	Date	Change	Revised By	Approved
A	99.10.26	New issue	EC	
B	03.10.06	Reformat; Incorporated D2916-1/-3/-5/-7	KJ/RF	

BB 04-08-24 RB

RELEASED  
03.10.17 RF

Dart Aerospace Ltd

Work Order:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Manuf / Design Mgr	Approval QC Inspector
04/08/23	PK 26	identify and stock in stores  ( D 2916-3 = 3 <sup>piece</sup> <del>pie</del> 21.92 D 2916-7 = 3 <sup>piece</sup> 20.75 D 2916-5 = 2 <sup>piece</sup> 20.98 )	FL	04/08/23		 du 28.24	

NCR		WORK ORDER NON-CONFORMANCE						
DATE	STEP	Description of NC section A	Corrective Action Section B		Sign & Date	Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial					

PAR#: \_\_\_\_\_ Fault Category: \_\_\_\_\_ DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries  
H:\Admin-QA\ISO\forms\w\oncB.doc

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

DART AEROSPACE LTD		Work Order:	20512
Description: Cable Guard		Part Number:	D2916-1
Inspection Dwg: D2916	Rev: B	Page 1 of 1	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.75	+/-0.030	1.735	✓			
38.94	+/-0.030	38.92	✓			
35.94	+/-0.030	35.94	✓			
32.25	+/-0.030	32.25	✓			
29.00	+/-0.030	29.00	✓			
15.00	+/-0.030	15.00	✓			
11.31	+/-0.030	11.31	✓			
3.19	+/-0.030	3.19	✓			
2.000	+/-0.010	1.997	✓			
21.125	+/-0.010	21.125	✓			
37.938	+/-0.010	37.936	✓			
Ø0.438	+0.005/-0.000	0.438	✓			
25.00	+/-0.030	25.00	✓			
24.00	+/-0.030	24.00	✓			
16.50	+/-0.030	16.50	✓			
15.01	+/-0.030	15.01	✓			
3.25	+/-0.030	3.25	✓			
2.33	+/-0.030	2.33	✓			
A-A	0.78	0.78	✓			
	0.70	0.70	✓			
B-B	0.140	0.137	✓			
	0.360	0.356	✓			
	0.88	0.857	✓			
C-C	1.31	1.300	✓			
	0.78	0.75	✓			
D-D	0.33	0.33	✓			
	0.37	0.37	✓			
	Ø0.438	0.438	✓			
E-E	Ø0.875	0.875	✓			
	Ø0.260	0.261	✓			
	0.37	0.377	✓			
J-J	Ø0.875	0.875	✓			
	1.44	1.450	✓			
	0.063	0.070	✓			

Measured by: <i>SP</i>	Audited by: <i>AB</i>	Prototype Approval:	N/A
Date: 04/03/11	Date: 04-08-18	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.01.12	New Issue	KJ/RF	RF

RELEASED

RF 04.01.14









# Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Mar 10, 2004  
01:25 pm

Work Order No : 0020512  
Project Name : \*D205-665-015  
Project For : WK416  
Work Order Type : Main  
Main WO Number :  
House Part Number : \*D205-665-015  
Description : Cable Guard Kit  
Manufactured : Yes  
Amount Req'd : 20  
Amount Done : 0  
Start Date : 03-10-04  
Est Finish Date : 04-14-04  
Act Finish Date :  
Drawings Req'd : No  
Ok for Approval :  
Approval Rec'd :

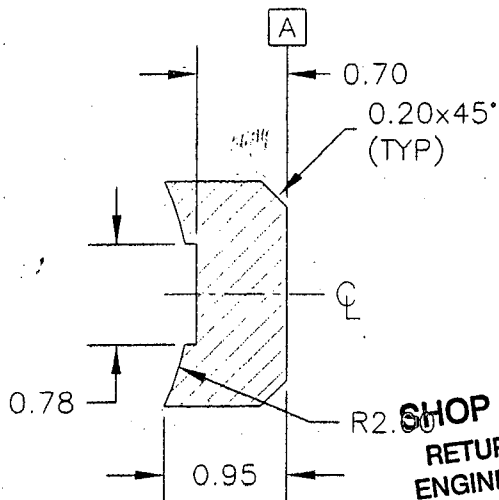
Department Code:  
Burden Flags : NNNNNNN  
WO Status : Open  
Invoice State : Not Invoiced  
Invoice Date :  
Invoice Number :  
Invoice Amount : 0.00  
Order Entry No :  
OE Value : 0.00  
Est Margin : 0.000%  
Actual Margin : 0.000%  
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Margin :	0.000	0.000			
Selling Cost :	0.00	0.00			

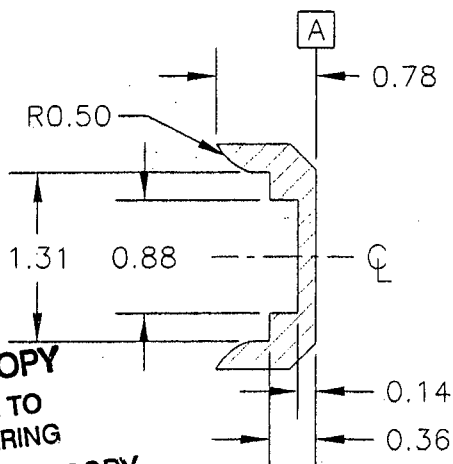
	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00



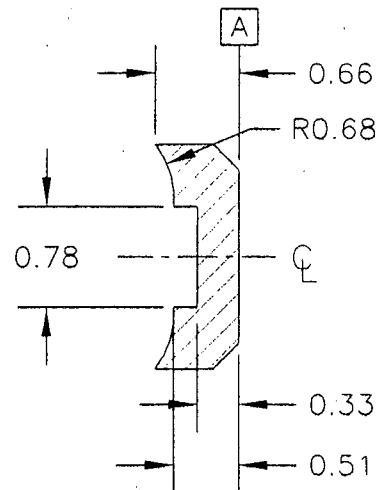
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CHECKED #	APPROVED #	DRAWING NO. D2916	REV. B SHEET 1 OF 2
DATE 00.02.24		TITLE CABLE GUARD	SCALE 1:6
A	99.09.29	NEW ISSUE	
B	00.02.24	ADD K-K FOR D2521 COMPATIBILITY	



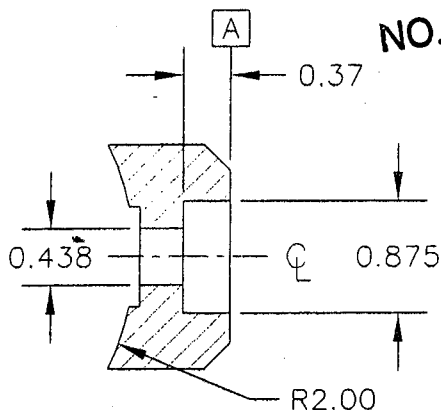
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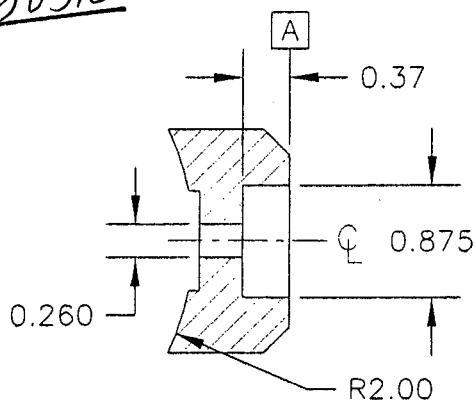
SECTION B-B  
(SCALE 2:3)



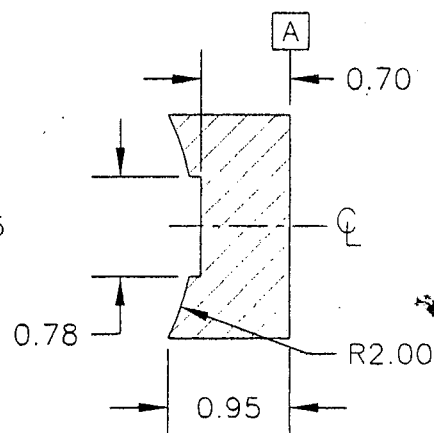
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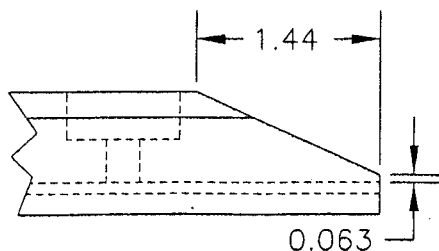
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(SCALE 2:3)



SECTION E-E  
(SCALE 2:3)

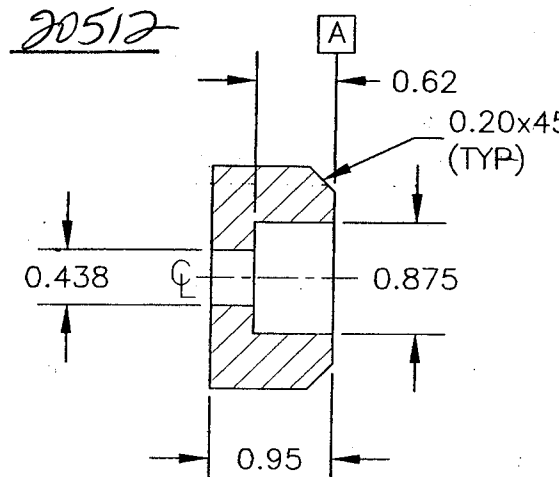
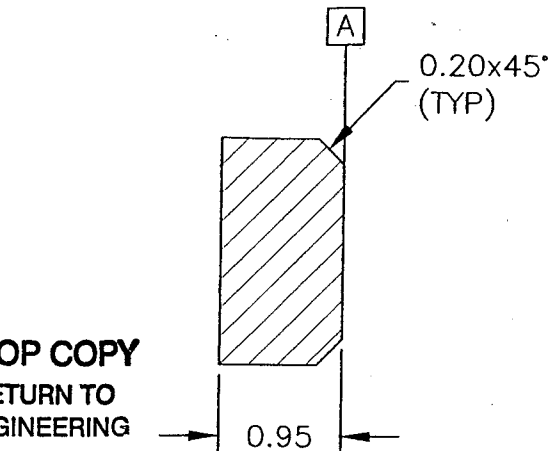
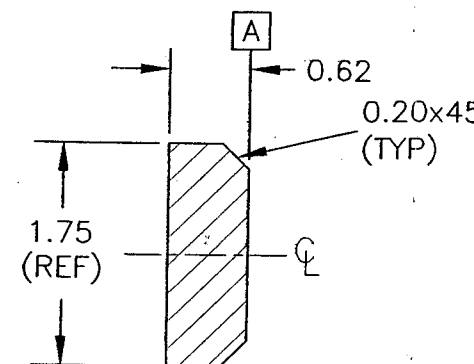
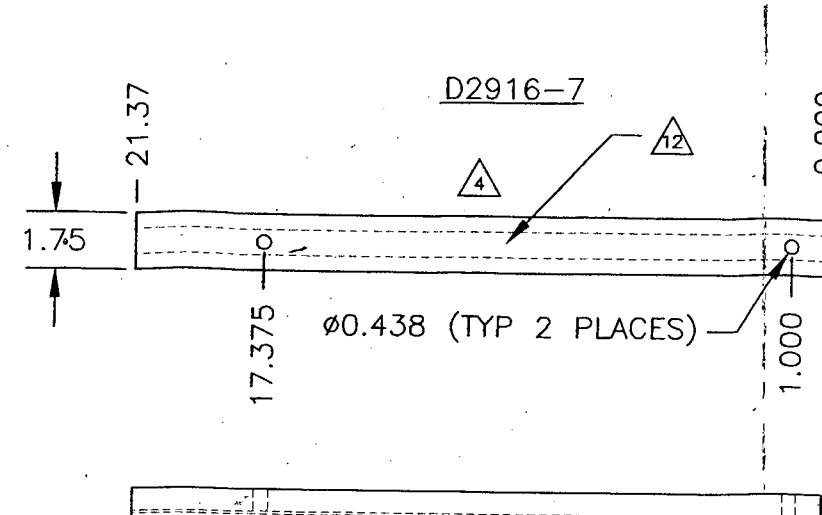
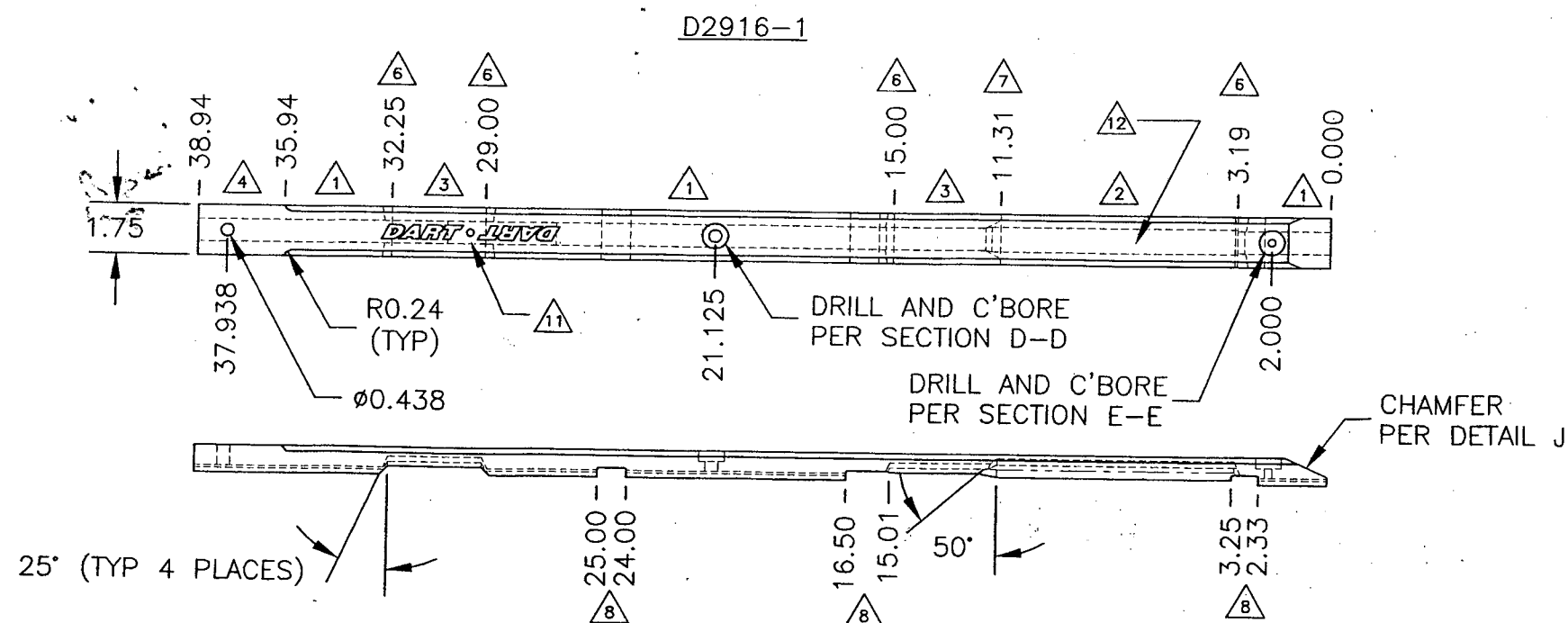
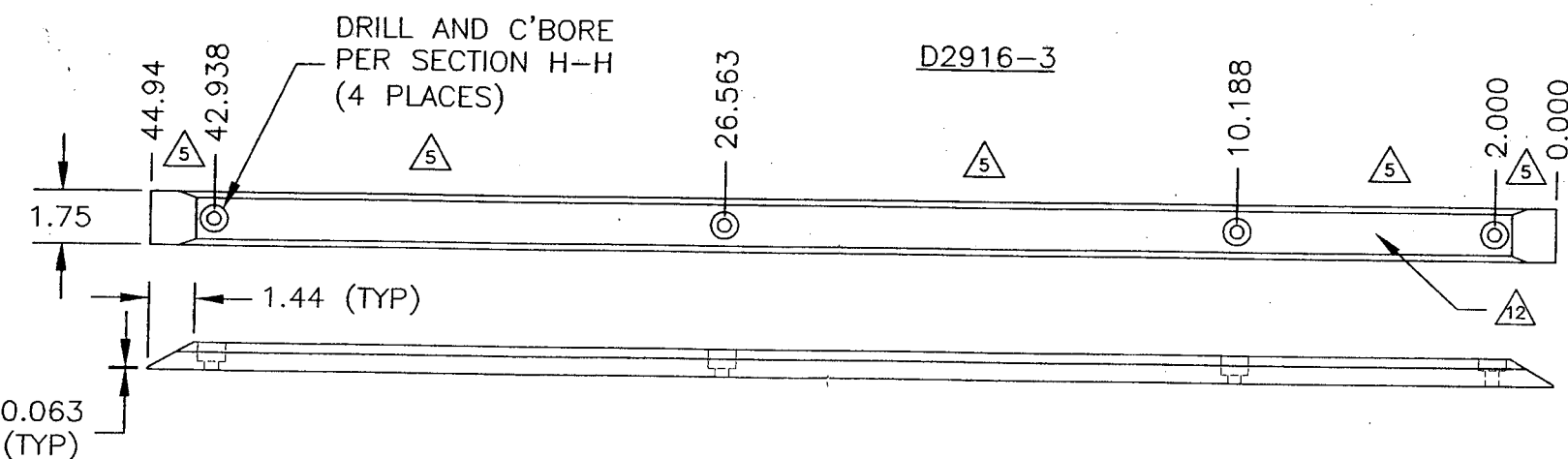
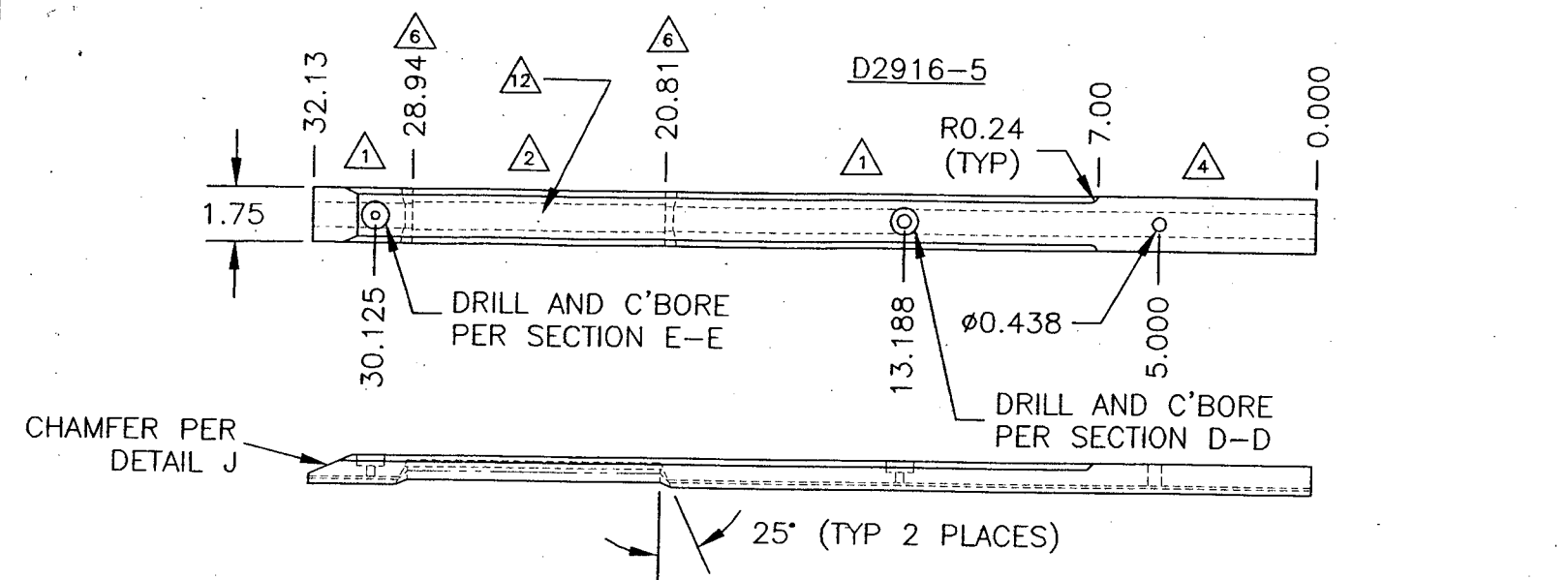


SECTION F-F



DETAIL J  
(SCALE 2:3)

RELEASED  
00.02.25 DS



SHOP COPY  
RETURN TO  
ENGINEERING

UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE

WORK ORDER  
NO. 20512

- NOTES:
- 1) MACHINE CONSTANT SECTION A-A
  - 2) MACHINE CONSTANT SECTION B-B
  - 3) MACHINE CONSTANT SECTION C-C
  - 4) MACHINE CONSTANT SECTION F-F
  - 5) MACHINE CONSTANT SECTION G-G
  - 6) 25° ANGLE OF TRANSITION BETWEEN SECTIONS WITH MIN RADIUS OF 0.50
  - 7) 50° ANGLE OF TRANSITION BETWEEN SECTIONS WITH MIN RADIUS OF 0.50
  - 8) MACHINE SLOT PER SECTION K-K WITH 0.063 RADIUS OF TRANSITION BETWEEN SECTIONS
  - 9) MATERIAL: UHMW BLACK PER SPEC CONTROL DWG D2689
  - 10) BREAK ALL UNMARKED RADII 0.020 TO 0.040
  - 11) ENGRAVE TWO DART LOGOS (OPPOSITE AS SHOWN) ON UPPER SIDE TO MAX DEPTH OF 0.015 AND MIN RADIUS OF 0.250.
  - 12) ENGRAVE P/N ON LOWER SIDE TO MAX DEPTH OF 0.010 AND MIN RADIUS OF 0.010.
  - 13) ALL HOLES DRILLED ON CENTERLINES
  - 14) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 15) ALL DIMENSIONS ARE IN INCHES

RELEASED  
00.02.25 DS

DESIGN #	DRAWN BY CP	<b>DART</b> DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D2916	REV. B SHEET 2 OF 2
DATE 00.02.24		TITLE CABLE GUARD	SCALE 1:6

